



US006276980B1

(12) **United States Patent**
Kim

(10) **Patent No.:** **US 6,276,980 B1**
(45) **Date of Patent:** **Aug. 21, 2001**

(54) **METHOD FOR FORMING ELECTRODE FOR PLASMA DISPLAY PANEL**

5,998,920 * 12/1999 Kim 313/479
6,120,975 * 9/2000 Tokai et al. 430/321

(75) **Inventor:** Sang-Tae Kim, Seoul (KR)

* cited by examiner

(73) **Assignee:** LG Electronics Inc., Seoul (KR)

Primary Examiner—Kenneth J. Ramsey

(74) *Attorney, Agent, or Firm*—Fleshner & Kim, LLP

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(57) **ABSTRACT**

The present invention relates to a discharge sustaining electrode formed of a transparent electrode and a non-transparent electrode for a plasma display panel (PDP), and it is an object of the present invention to provide a method for an electrode which is well applicable to forming a non-transparent electrode using an Ag material and providing a good productivity and a certain contrast characteristic. The method for forming a bus electrode according to the present invention includes a first step for coating Ag paste including some black powder having different specific gravity particles and some Ag white powder on the transparent electrode, a second step for level-separating the black and white powders contained in the coated Ag paste based on a specific gravity difference for a certain time, and a third step for burning out a binder from the coated Ag paste to thereby implementing a firing process. Therefore, it is possible to implement a two-tier bus electrode structure based on one time paste printing operation to thereby decrease a formation process of an electrode.

(21) **Appl. No.:** 09/365,879

(22) **Filed:** Aug. 3, 1999

(30) **Foreign Application Priority Data**

Aug. 5, 1998 (KR) 98-31912

(51) **Int. Cl.⁷** H01J 9/02

(52) **U.S. Cl.** 445/24; 427/125

(58) **Field of Search** 445/24; 427/125

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,774,038 * 11/1973 Ligtenberg 250/214 VT
4,243,455 * 1/1981 Shiba et al. 156/187
4,507,151 * 3/1985 Simm et al. 75/255
5,122,215 * 6/1992 Shibata et al. 156/250
5,662,846 * 9/1997 Swarts 264/69

6 Claims, 3 Drawing Sheets

